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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,667	01/02/2002	Jaewon Choung		5723

9385 7590 07/31/2003

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EXAMINER

HRUSKOCI, PETER A

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,667

Applicant(s)

CHOUNG ET AL.

Examiner

Peter A. Hruskoci

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Claims 5, 7, 9, 16, 18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 5 and 16 "including" and in claims 7, 9, 18, and 20 "comprising" are vague and indefinite because it is unclear how these terms further limit the claims. It is noted that proper Markush format utilizes the term -- selected from the group consisting of --.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Messer.

It is submitted that Messer (see col. 3 line 47 through col. 9 line 8) appear to disclose the method steps recited in the instant claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messer.

The claims differ from Messer as applied above by reciting the addition of a specific amount of oil and flocculant. It is submitted that the amounts of oil and flocculant added in Messer are considered patentably indistinguishable from the amounts utilized in the instant method. It would have been obvious to one skilled in the art to modify the method of Messer by utilizing

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the recited amounts, to aid in separating mineral matters and providing a clarified aqueous phase. The specific amounts of oil and flocculant added would have been an obvious matter of process optimization to one skilled in the art of liquid purification, depending on the specific coal fines treated and results desired, absent a sufficient showing of unexpected results.

Claims 2, 3, and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messer in view of Yoon. The claims differ from Messer as applied above by reciting that the mixing of the oil and flocculating agent and/or coagulating agent is integrated into a single stage, and the coagulating agent is selected from a specific group. Yoon disclose (see Example 17) that it is known in the art to utilize oil and a coagulating agent such as aluminum ions in a single stage to aid in dewatering a coal slurry. It would have been obvious to one skilled in the art to modify the method of Messer by utilizing the recited single stage and coagulating agent in view of the teachings of Yoon, to aid in separating water from the coal fines. The specific amounts and ratios of the flocculating and coagulating agents added would have been an obvious matter of process optimization to one skilled in the art of liquid purification, depending on the specific coal fines treated and results desired, absent a sufficient showing of unexpected results.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (703) 308-3839. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached on (703) 308-1261. The fax phone number for this Group is (703) 872-9310 (non-after finals) and 703-872-9311 after finals.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Peter A. Hruskoci
Peter A. Hruskoci
Primary Examiner
Art Unit 1724

P. Hruskoci
July 28, 2003